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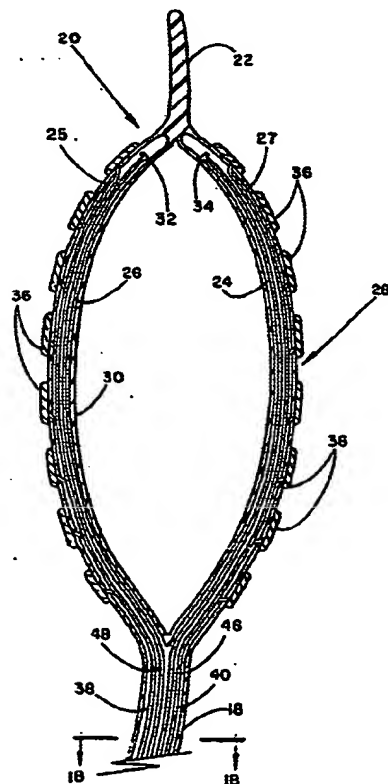
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<p>(21) International Application Number: <b>PCT/US93/01636</b></p> <p>(22) International Filing Date: <b>23 February 1993 (23.02.93)</b></p> <p>(30) Priority data:              07/840,162                      24 February 1992 (24.02.92)    US              07/909,869                      7 July 1992 (07.07.92)        US</p> <p>(71)(72) Applicant and Inventor: <b>AVITALL, Boaz [US/US];</b>              4868 North Ardmore Avenue, Milwaukee, WI 53217              (US).</p> <p>(74) Agent: <b>MERSEREAU, C., G.; Haugen and Nikolai, 820</b>              International Centre, 900 Second Avenue South, Min-              neapolis, MN 55402 (US).</p>		<p>(81) Designated States: CA, JP, KR, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).</p> <p><b>Published</b>  <i>With international search report.</i>  <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>

(54) Title: **DEFLECTABLE LOOP ELECTRODE ARRAY AND METHOD**

(57) Abstract

A cardiac arrhythmia mapping and ablation catheter has a main catheter (18) that is provided with a mapping and ablation system attached to its distal end which includes an adjustable loop (20) carrying an electrode array including a plurality of parallel-connected, separately operable mapping/ablation electrodes (36) in conductive relation to the external environment and arranged in spaced serial relation along the loop. Insulated conductors (38, 40) connect the electrodes (36) electrically with an input/output device outside the catheter for mapping the electrical activity of the chamber wall contacted and ablating tissue as indicated. Drawstring control wires (24, 26) are used to control the size, shape and deflection or posture of the loop (20). A distal extension (22) may optionally be provided to adapt the loop specifically to addressing the tricuspid annulus. A fixed version is also disclosed.



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